REQUEST FOR INFORMATION

Comprehensive Online Application Portal for Solar Installations

KEY INFORMATION SUMMARY SHEET

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DISCLAIMER

This Request for Information (RFI) is issued solely for information and planning purposes, and does not constitute a solicitation or procurement by the Maryland Energy Administration (MEA) or the State of Maryland. Responses to this RFI are not offers and cannot be accepted by MEA, or the State of Maryland, to form a binding contract. Respondents are solely responsible for all expenses associated with responding to this RFI. Responses to this RFI will not be returned. Responses to this RFI are subject to Public Information Act (PIA), Title 10, Subtitle 6, Part III of the State Government Article, Annotated Code of Maryland.

Respondents are responsible for clearly identifying those portions of their response that they consider confidential, proprietary commercial information or trade secrets, and for providing justification to MEA why such materials, upon request, should not be disclosed under the PIA.

1. PURPOSE

The Maryland Energy Administration (MEA) is issuing this RFI to gather information from stakeholders and interested contractors regarding the development of a Comprehensive Online Application Portal (COAP). Ultimately, the purpose of COAP is to create a cloud based application, which facilitates and expedites the solar permitting/inspections processes in Authorities Having Jurisdiction (AHJ) throughout the State. COAP will also facilitate the submission of applications to the MEA's Clean Energy Grant Program (CEGP), the interconnection process with utilities, the Public Service Commission (PSC) solar generating facility registration process, and PJM-EIS Generation Attribute Tracking System (PJM-GATS) registration. COAP would be accessible to solar contractors, solar customers, AHJs and other stakeholders such as the PSC, utilities, and PJM Interconnection. MEA hopes that this initiative will significantly reduce the time and costs associated with solar installations in Maryland while encouraging transparency, best practices and process uniformity across participating jurisdictions. MEA is seeking information regarding the capacity of industry to respond to this need. MEA also seeks input from AHJs and other stakeholders interested in COAP.

2. BACKGROUND

The Soft Costs of Solar

The State of Maryland adopted a Renewable Portfolio Standard (RPS), which requires 20 percent of Maryland's electricity to be generated by renewable resources by 2022, including two percent from in-state solar generating facilities. With the adoption of the two percent solar requirement, also known as a solar carve-out, Maryland has seen a significant increase in installed solar capacity over a relatively short period of time. Likewise, because of the solar carve out, more and more Maryland residents have been able to take advantage of the State's abundant solar resource while reducing electricity bills and supporting Maryland's greenhouse gas (GHG) emissions reduction goals.

However, this abrupt increase in solar installations has also resulted in new administrative burdens on AHJs, as they have been forced to quickly implement the processes necessary to permit and inspect an increasing number of solar projects in their jurisdictions. Likewise, as individual AHJs developed their permitting and inspection processes for solar photovoltaic (PV) and solar water heating installations, solar contractors, electricians, and customers have also faced hurdles. Steep learning curves associated with the process for applying for building, electrical, and plumbing permits and inspections have required much time, money, and effort. Moreover, installers have been forced to master numerous application processes, as requirements often vary greatly, even among neighboring AHJs.

The challenges faced by both the solar industry and AHJs have had a significant and tangible effect on Maryland consumers as well. A 2013 report from the U.S. Department of Energy's

Lawrence Berkeley Laboratory indicates that the soft costs associated with residential PV in the US account for $3.34/W; by contrast, those same costs account for only $0.62/W in Germany—a factor of more than 500%. MEA recognizes that the soft costs of solar, including permitting, inspections, interconnection, and the work associated with obtaining solar incentives is an issue for not only AHJs and permitting offices, but for the solar industry and Maryland residents as well.

3. MEA Proposal

Comprehensive Online Application Portal

MEA is currently contemplating the development of a Comprehensive Online Application Portal to address the soft costs of solar in Maryland. First, COAP would facilitate the implementation and adoption of some solar permitting/inspections best practices as accepted by leaders in this field. Those practices include, but are not limited to[1]:

- Post requirements online;
- Implement an expedited permit process;
- Enable online permit processing;
- Track online permit processing status;
- Ensure a fast turnaround time;
- Collect reasonable permitting fees;
- Offer a narrow inspection appointment window and enable online inspection scheduling;
- Eliminate excessive inspections; and
- Train permitting staff in solar.

By adopting these best practices and utilizing COAP for each jurisdiction, MEA believes the benefits would be felt immediately in the form of decreased costs to AHJs, the solar industry, and solar customers. MEA's goal is to ultimately lower total installation costs for residents and businesses. Were COAP to be adopted in numerous counties and cities the expected benefit would grow significantly. Increased uniformity across multiple jurisdictions translates into a greater familiarity with permitting requirements and more efficient permitting processing and compliance. Installers benefit because they spend less time learning the particularities of each jurisdiction's requirements and can instead focus on designing safe and effective systems that can be installed at a low cost. AHJs benefit because the overall quality of the applications and

[1] http://projectpermit.org/wp-content/uploads/2013/04/Expanded-Best-Practices-7.23.13_VSI.pdf

the installations increases. As a result, AHJ staff has to spend less time educating installers and ensuring compliance with relevant standards[2].

In addition to the facilitation of online permitting/inspections processes, COAP would ultimately incorporate multiple components of a solar project's lifecycle. MEA envisions the portal will also incorporate the MEA Clean Energy Grant Program application process, the utility interconnection process, PSC's solar generating facility registration process, and the PJM-GATS registration process. This additional functionality will be built out in a modular fashion, allowing for multiple stages of portal development over a period of several years. The desired timeline from the contract award date is as follows:

0-6 Months: Development and roll out of a "Landing Page" and "AHJ Portal Page"

Deliverables:

- Selected contractor will engage with MEA to understand full scope of project.
- Selected contractor will engage with AHJs to understand individual jurisdiction's current permitting/inspections processes, including gaining an understanding of internal as well as publically facing permit/inspections applications.
- Selected contractor will also meet with AHJs to ensure their respective Home Pages and documentation incorporates their official logos or seals and any other unique and identifying design requirements.
- Development of a Landing Page
    - links to each AHJ's Portal Page
- Development of four AHJ Portal Pages on which the following documents will reside:
    - Permitting requirements (Solar PV and Solar Water Heating)
    - Application(s) available for download
    - Supporting documentation requirements
    - Permit fee schedule
    - Processing time information
    - Inspections information
- Introductory training(s) (in person and/or webinar) to permitting staff, solar industry representatives, and interested citizens

[2] http://projectpermit.org/wp-content/uploads/2013/04/Permitting-Regional-Consistency.pdf

6-12 Months: Development of online permitting/inspections component of portal for all four participating jurisdictions. Ongoing training and troubleshooting provided to AHJ staff and other portal users.

Deliverables:

- Develop COAP and make login available on Portal Pages.
    - COAP will not yet communicate with MEA, PSC, utilities or PJM-GATS, however, the portal needs to maintain the ability to eventually interact with these other agencies.
- Develop system for establishing and verifying user type and credentials. Users could be AHJ and permitting staff, system installers and contractors, governmental users (MEA, PSC), non-governmental users (PJM, utilities), and residential users.
    - COAP functionality will vary depending upon the type of user
- Where online submission and processing of permit applications is not available, the portal developer will enable permit processing via the portal, which must be capable of communicating with the AHJ's current internal permit software.
- Where online scheduling of inspections is not available, the portal developer will enable inspections scheduling through COAP.
- Where online scheduling or permitting and/or inspections is offered by the AHJ, the portal should be connected to AHJ's portal.
- COAP should notify users of account changes and process updates (e.g., successful submission of applications, errors, passed inspections notifications) throughout the process

12-18 Months: Expansion of portal capabilities

Deliverables:

- Enable the portal to communicate with the MEA's electronic submission of applications to the Clean Energy Grant Program. Populate fields within the CEGP application and notify account holder of partially prepared application.
    - A grant application should be automatically prepared upon final passed inspection notification.
- Enable the portal to populate and generate the appropriate interconnection application (appropriate application is determined according to the Maryland Small Generator Interconnection Rule, which is implemented by the utility).
- Enable the portal to communicate with PJM-GATS. Populate portions of the application with previously obtained information.

Ongoing: Incorporation of additional AHJs. Continued improvement and expansion of portal.

Deliverables:

- MEA will continue engagement and recruitment of additional AHJs who will take advantage of COAP. The contractor will need to build out the portal for each new jurisdiction.
- Continue to train new users.
- Refine portal capabilities and processes.
- Refine reporting capabilities.
- Update COAP as AHJs update permitting requirements, applications, etc.
- Ongoing technical support.

4. QUESTIONS TO RESPONDERS

MEA seeks input from stakeholders who can provide valuable information regarding online application systems, including:

- Project developers of solar and solar water heating projects;
- Software development firms that have experience designing and developing online application portals;
- Software development firms that have experience implementing and managing online applications;
- Firms with experience in expedited solar permitting practices and/or online solar permitting portals;
- AHJs who have experience permitting solar and solar water heating installations;
- Firms or individuals with experience in applying for MEA clean energy grants;
- Firms or individuals with experience in applying for project interconnection agreements with various Maryland based electric utilities;
- Firms or individuals with experience applying for certification as a solar renewable energy facility with the Maryland Public Service Commission;
- Firms with experience in registering solar renewable energy facilities with the PJM-GATS;
- Non-governmental organizations and academic institutions with experience or interest in this area; and
- Any other persons or groups that have experience working with online application portals for State and Local governments.

MEA requests respondents provide feedback on the following questions:

Questions for potential developers:

1) Do you recommend that the MEA, the portal developer, or another entity host the solar permitting portal?

2) What types of information would be required from Authorities Having Jurisdiction (AHJ) in order to determine if the solar permitting portal could communicate with existing permitting applications?

3) When developing an application for multiple entities using a variety of applications or software for permitting, what are potential fatal flaws and how can these be detected or avoided (e.g., security related restrictions, programming restrictions, etc.)?

4) What support and/or training is required for the successful deployment and implementation of new software applications? How long (i.e., how many weeks or hours are required?), how many trainers, troubleshooters, and/or training sessions are typically required in order to roll out a new product?

5) Please share any security measures that should be taken to ensure client data security.

6) What strategies and precautions can be taken by AHJs and the portal developer to ensure future changes in either the portal or an AHJ's internal permitting application remain compatible?

7) What is a reasonable expected annual uptime for the portal?

8) Is the proposed schedule and corresponding lead time reasonable? If not, in what way would you modify it?

9) Does the order of deliverables allow for the most efficient and effective deployment of COAP? If not, in what way would you modify it?

10) What is a reasonable expectation for ongoing O&M costs associated with COAP? This does not have to be in the form of a specific dollar amount and can instead be described in hours or number of full or part time employees recommended.

11) Once COAP is fully functional for the first four jurisdictions, approximately how long would it take to build out that same functionality for additional jurisdictions?

12) Are there any specific features that should be included in the online portal that are not already addressed?

13) Please provide any additional information or insight you may have that could be of use to the State and COAP developer.

Questions for AHJs:

1) What are the specific reporting capabilities you would like to see? What types of information would you like to be able to track?

2) What, if any, internal or publicly facing permitting application do you currently use? Who can access your system?

3) What is the process for user verification for residents/solar contractors/licensed individuals?

4) What other agencies do you work with when processing permits (e.g., fire marshal)?

5) If you currently accept permits online, what types of files do you allow for submission (e.g., word, excel, .pdf, CSV, etc.)?

6) What type of information should be kept visible to AHJs only to process all relevant permits?

7) How can the online portal facilitate a faster turnaround time for applications?

8) Is an electronic submission of drawings acceptable for your permit review staff? If not, what prevents you from accepting electronic versions of drawings?

9) Do you accept electronic signatures and if so, what type of software enables you to do so?

10) Are there any specific functions the portal could perform to assist you in your inspections process?

11) If possible, what type of portable hardware would be of use to your inspections department?

12) Would you want the ability to access COAP via a mobile application?

13) Please provide any additional information or insight you may have that could be of use to the State and COAP developer.

Questions for stakeholders obtaining permits or registering systems in Maryland:

1) Please explain any hurdles you have faced while obtaining permits through AHJs.

2) Would it be useful and more efficient if COAP were available via a mobile application?

3) In what counties do you perform the majority of your work?

4) If you are a solar system installer or developer, how frequently do you also register the system with the PSC and PJM-GATS?

5) If you are an SREC aggregator, as it is currently envisioned, would COAP be of any assistance to you?

6) Please provide any additional information or insight you may have that could be of use to the State and COAP developer.

5. RFI RESPONSE FORMAT

Please submit responses via e-mail in the form of a PDF. Be sure to include, in any response, an outline that addresses the questions in Section 4 of this document, along with any additional information that may be helpful to the state in development of a RFP.

6. QUESTIONS AND INQUIRIES

MEA will not be taking questions regarding this RFI by phone, e-mail, or in person. If respondents wish to submit follow-up questions to MEA about opportunities related to this RFI, they may do so in their response when submitting answers to the RFI questions. MEA will, at the appropriate time, address those questions, in aggregate, in a manner that will maintain the anonymity of the developer.